## **CLAIMS**

- 1. An alternator comprising:
  - a rotor fixed to a shaft so as to rotate with said shaft;
- a stator disposed so as to surround said rotor, an alternating current being generated in said stator by a rotating magnetic field from said rotor; and
- a voltage control apparatus for adjusting magnitude of an output voltage of said alternating current generated in said stator,

wherein:

said voltage control apparatus comprises:

- a grounded, electrically-conductive heat sink; and
- a control main body fixed to said heat sink, said control main body including an integrated circuit chip on which a circuit for controlling said output voltage is formed.
- 2. The alternator according to Claim 1, wherein:
- a positioning portion for positioning said control main body relative to said heat sink is disposed on said heat sink so as to project from a major surface of said heat sink to which said control main body is fixed.
- 3. The alternator according to either of Claims 1 or 2, wherein:
- a blocking portion is disposed on said heat sink between a connector having terminals for electrical connection to an external portion and said integrated circuit chip, said blocking portion blocking electromagnetic noise from said connector.
- 4. The alternator according to any one of Claims 1 through 3, wherein: said control main body is a molded package in which said integrated circuit chip is enveloped in a resin.
- 5. The alternator according to Claim 4, wherein: said molded package has a hexahedral shape; and said heat sink has a substantially angular C-shaped cross section and is placed in close contact with at least three surfaces of said molded package

excluding a surface from which connecting terminals project.